MS Brain Health
Time Matters

Why manage comorbidities in people with multiple sclerosis?

Have you considered why multiple sclerosis (MS) progresses more quickly in some of your patients than in others? Many people with MS have at least one comorbidity, even at diagnosis. By 'comorbidity', we mean any illness that is not MS or a complication arising from MS. Such conditions may contribute to greater disability, accelerated disease progression, reduced quality of life and increased mortality.[1] Could we improve outcomes by incorporating the prevention and management of comorbidities into the care of people with MS?

The prevalence of comorbidities in people with MS is high and increases with age (Figure 1). Such illnesses can impair cognition and health-related quality of life, but in people with MS they may also affect disease progression and treatment outcomes.

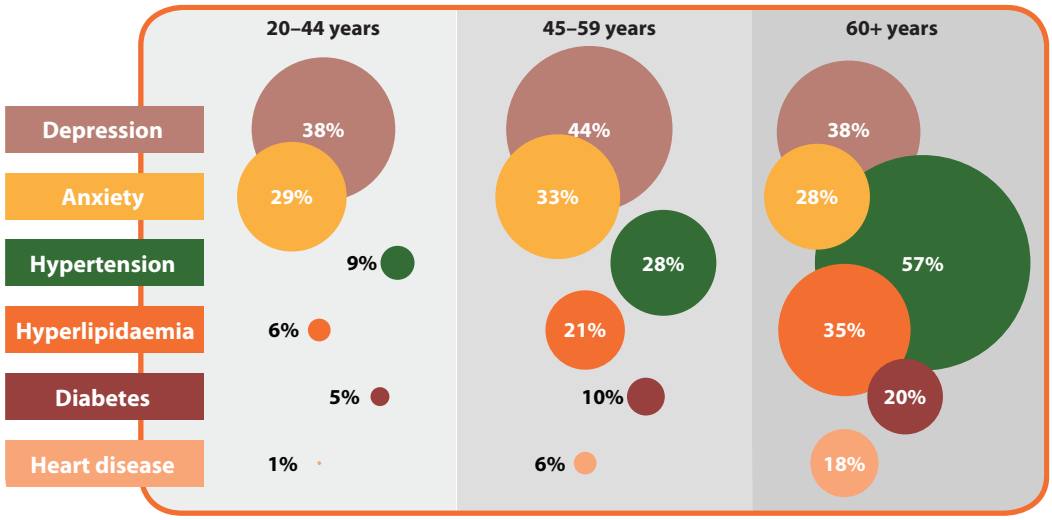
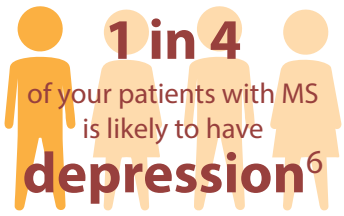


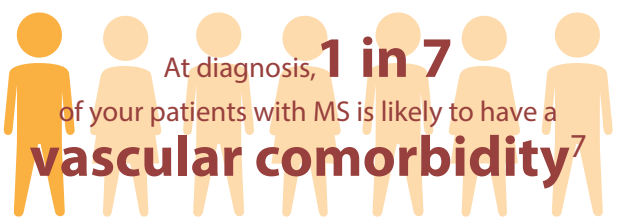
Figure 1. Lifetime prevalence of common comorbidities in people with MS, by age group.[1]

Cognition and health-related quality of life may be worsened by comorbidity.

Depression and anxiety are common in people with MS and may be associated with reduced cognitive function, as is the case in people without MS. Between 40% and 70% of people with MS experience cognitive problems;[2,3] addressing comorbidities could positively impact cognitive function in these individuals. Comorbidities, including depression and anxiety, are also associated with reduced health-related quality of life in people with MS.[4,5] Therefore, treating comorbidities should be a priority for patient well-being.



> Evidence suggests that comorbidity adversely affects outcomes throughout the disease course in MS
>
> *– Dr Ruth Ann Marrie*



MS disease progression may be affected by comorbidity throughout the disease course.

Comorbidities are associated with delays in diagnosis and greater disability at diagnosis.[8] Even at the time of diagnosis, comorbidities are common in people with MS,[1] so it is important to look out for them from the first assessment.

Comorbidities affect relapse rates, magnetic resonance imaging (MRI) findings and disability progression. In one study, the odds of relapse during the previous year were 2.6-fold higher in patients with three or more

comorbidities than in those with no comorbidity.[9] Cross-sectional studies indicate that increased lipid levels are linked with greater brain lesion burden and brain atrophy, as measured by MRI.[10–13] People with vascular comorbidities are likely to experience greater disability progression in the long term than those with no comorbidity.[14,15]

Treatment outcomes may be affected by comorbidity. The safety, tolerability and effectiveness of disease-modifying therapies (DMTs) might be affected by certain comorbidities.[1] Therefore, existing comorbidities may influence treatment decisions and treatment goals. Some DMTs increase the risk of developing specific comorbidities, so relevant risk factors should be identified before initiating treatment.

> It is time to integrate comorbidity management into MS care
>
> *– Dr Ruth Ann Marrie*

How can you minimize the effects of comorbidities in your patients?

- **Identify comorbid conditions as early as possible.**
  - Consider screening patients for common comorbidities such as depression, anxiety and vascular conditions at the first assessment after diagnosis.
- **Empower people with MS to adopt positive health behaviours.**
  - Explain that comorbid conditions can affect their disease progression.
  - Encourage patients to take any medications prescribed for comorbidities.
  - Provide educational materials and support to enable patients to live a brain-healthy lifestyle (Figure 2).[16] For more information, see *Six ways to lead a brain-healthy lifestyle* (available from www.msbrainhealth.org/resources).

Figure 2. Evidence-based lifestyle advice for people with MS.

- **Ensure the choice of DMT is appropriate.**
  - Take into account any relevant comorbidity risk factors.
  - Remember that treatments for some comorbid conditions are contraindicated in people receiving certain DMTs; do not consider treatments in isolation.
- **Engage with primary care providers and collaborate on care.**
  - Contact your patients' primary care providers to highlight the need to identify and manage comorbidities in people with MS.

This document is based on Comorbidity in multiple sclerosis: implications for patient care *by Dr Ruth Ann Marrie.[1] Dr Marrie is a Professor of Medicine and Community Health Sciences at the University of Manitoba, Winnipeg, Manitoba, Canada.*

References

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